Task Order No. 832

USAID Contract No. PCE-I-00-96-00002-00

Egyptian Environmental Policy Program
Program Support Unit

Tranche 1, Objective 4

June 2000

PSU-01

for
U.S. Agency For International Development
Cairo

by
Environmental Policy & Institutional Strengthening
Indefinite Quantity Contract (EPIQ)

A USAID-funded project consortium led by International Resources Group, Ltd.

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Questionnaire: Emission Standards for Air Pollutants

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Fact Sheet

USAID Contract No.:	PCE-I-00-96-00002-00 Task Order No. 832
Contract Purpose:	Provide core management and analytical technical services to the Egyptian Environmental Policy Program (EEPP) through a Program Support Unit (PSU)
USAID/Egypt's Cognizant Technical Officer:	Holly Ferrette
Contractor Name:	International Resources Group, Ltd.
Primary Beneficiary:	Egyptian Environmental Affairs Agency (EEAA)
EEAA Counterpart:	Eng. Dahlia Lotayef

Preface

Through competitive bidding, the U.S. Agency for International Development (USAID) awarded a multi-year contract to a team managed by International Resources Group, Ltd. (IRG) to support the development and implementation of environmentally sound strategic planning, and strengthening of environmental policies and institutions, in countries where USAID is active. Under this contract, termed the Environmental Policy and Institutional Strengthening Indefinite Quantity Contract (EPIQ), IRG is assisting USAID/Egypt with implementing a large part of the Egyptian Environmental Policy Program (EEPP).

This program was agreed-to following negotiations between the Government of the United States, acting through USAID, and the Arab Republic of Egypt, acting through the Egyptian Environmental Affairs Agency (EEAA) of the Ministry of State for Environmental Affairs, the Ministry of Petroleum's Organization for Energy Planning, and the Ministry of Tourism's Tourism Development Authority. These negotiations culminated with the signing of a Memorandum of Understanding in 1999, whereby the Government of Egypt would seek to implement a set of environmental policy measures, using technical support and other assistance provided by USAID. The Egyptian Environmental Policy Program is a multi-year activity to support policy, institutional, and regulatory reforms in the environmental sector, focusing on economic and institutional constraints, cleaner and more efficient energy use, reduced air pollution, improved solid waste management, and natural resources managed for environmental sustainability.

USAID has engaged the EPIQ contractor to provide Program Support Unit (PSU) services to EEPP. The PSU has key responsibilities of providing overall coordination of EEPP technical assistance, limited crosscutting expertise and technical assistance to the three Egyptian agencies, and most of the technical assistance that EEAA may seek when achieving its policy measures.

The EPIQ team includes the following organizations:

- Prime Contractor: International Resources Group
- Partner Organization:
  - Winrock International
- Core Group:
  - Management Systems International, Inc.
  - PADCO
  - Development Alternatives, Inc.
- Collaborating Organizations:
  - The Tellus Institute
  - KBN Engineering & Applied Sciences, Inc.
  - Keller-Bliesner Engineering
  - Conservation International
  - Resource Management International, Inc.
  - World Resources Institute's Center For International Development Management
  - The Urban Institute
  - The CNA Corporation.

For additional information regarding EPIQ and the EEPP-PSU, contact the following:

United States of America:
EPIQ Prime Contractor
International Resources Group, Ltd
1211 Connecticut Ave, NW
Suite #700
Washington, DC 20036
Telephone: (1-202) 289-0100
Facsimile: (1-202) 289-7601
Contact: Douglas Clark
Vice President

Egypt:
EEPP-PSU
International Resources Group, Ltd
21 Misr Helwan Agricultural Road
Office 62, 6th Floor
Maadi, Cairo 11431
Telephone: (20-2) 380-5150
Facsimile: (20-2) 380-5180
Contact: Harold van Kempen
Chief of Party

Abbreviations, Acronyms, and Glossary

ATF	Agency Task Force
CEO	Chief Executive Officer
EC	Executive Committee
EEAA	Egyptian Environmental Affairs Agency
EEPP	Egyptian Environmental Policy Program (a USAID-funded program aimed at achieving a series of environmental policy reform performance objectives)
EEPP-PSU	Egyptian Environmental Policy Program, Program Support Unit
EIA	Environmental Impact Assessment
EMU	Environmental Management Unit (of a governorate)
EPF	Environmental Protection Fund
EPIQ	Environmental Policy and Institutional Strengthening Indefinite Quantity Contract. This is a contract issued by USAID's Global Bureau that enables environmental policy services to be provided to USAID missions worldwide.
GIS	Geographic Information System
GOE	Government of Egypt
IEMS	Integrated Environmental Management System
IP3	Institute for Public-Private Partnerships
MOEA	(Egyptian) Ministry of Environmental Affairs
MSWM	Municipal Solid Waste Management
NEAP	National Environmental Action Plan (for Egypt)
OEP	Organization of Energy Planning, attached to the Ministry of Petroleum
RBO	Regional Branch Office (of EEAA)
TDA	Tourism Development Authority, attached to the Ministry of Tourism
USAID	U.S. Agency for International Development
USEPA	U.S. Environmental Protection Agency
WG	Work Groups

INTRODUCTION

Issuing the Environmental Law No. 4, 1994 was the serious legislative beginning to face emissions problem resulting from air pollution sources that affect the air quality. Air pollutants concentrations depend primarily on the quantities of the emitted pollutants into the air of an area or city. To improve the air quality, certain procedures shall be adopted to mitigate air emissions. Emission Standards are the legal limits that should be complied with by the operators of such emissions sources, either stationed or mobile. Since the issuance of the Law No. 4, 1994 and its Executive Regulations, many efforts have been exerted to develop environmental compliance plans, to help industrial facilities to comply with the law, establish environmental registers, develop self-monitoring systems, carry out vehicle emissions testing, support monitoring labs, monitor emissions of some industrial facilities, and determine whether they are in compliance with the standards of the Executive Regulations. Executive Regulations require routine inspection, as per the Law 4, 1994, to mitigate air pollution and to maintain sustainable development through protecting the air environment, in parallel with carrying out different economic activities to serve the national economy. Therefore, the proposed modifications and review of the Executive Regulations shall depend on the gained experiences during the past period of enforcing the law, analyzing the problems encountered the enforcing of the Executive Regulations, and the problems encountered by the facilities in complying with the law and the requirements of the Executive Regulations. Also, the positive and negative aspects or shortcomings that became apparent during the enforcement process. This should be taken into account to facilitate the realization of sustainable development during the next stage. Furthermore, the experiences of the preceding countries in the field, whether developed or developing countries, should be taken into account during the legislation process and enforcement of the law. Consequently, it was recommended that concerned stakeholders of the law and its Executive Regulations, including executive governmental agencies, industrial facilities owners, other activities responsible staff, experts, consultants, scientific researchers, EEAA, and the State Ministry for Environmental Affairs shall participate in this questionnaire and address the learned lessons and proposals. So, any proposed modifications could be formulated properly and could be applied. This consultative process shall provide an opportunity for all involved stakeholders to identify the negative and positive aspects to reach the final goal of sustainable development and improvement of the air environment in industrial cities and zones.

QUESTIONNAIRE

A. Workshop participant data:

Agency to which the workshop member is affiliated (please mark the agency type):

a. Executive - Governmental
b. Consultant – Research
c. Educational – Media
d. Industrial – Other activities
e. Non-governmental organization
f. Political party – Popular organization
g. EEAA – Ministry of Environment – RBOs

B. All attendees, are requested to answer questions 1 through 36 (Answering all questions is not obligatory):

1. Do you believe that the Environmental Law and its Executive Regulations, especially air pollution and source emissions, were satisfactorily covered by media and public awareness?

   Yes No

2. Do you believe that the essential concept of Integrated Air Quality Program has been satisfactorily understood?

   - By the public (Yes/ No)
   - By officials (Yes/ No)
   - By Energy and industry professionals (Yes/ No)

3. In your opinion, what is the goal of inspecting and enforcing Emission Standards?
   a. improving air environment in one step.
   b. Improving air environment gradually heading to the final goal.
   c. Reaching the air pollution permissible limits immediately.
   d. Reaching the air pollution permissible limits gradually.
   e. Monitor violations and impose fines on violators or suspend their work.

4. Do you believe that the standard emissions stated in the current Executive Regulations have been covered sufficiently?
   a. Stationed Sources: (Yes/ No)
   Why?
   .....
   b. Mobile Sources: (Yes/ No)
   Why?
   .....

5. Which air pollution sources do you believe are not sufficiently addressed in the Executive Regulations?
   1. 2.
   3. 4.
   5. 6.

6. In your opinion, what are the best ways to determine the appropriate standard air emissions?
    a. Linking between the actual emissions and the standard air emissions.
    b. Controlling the industrial operations and energy sources to facilitate its efficient utilization to reduce pollution
    c. Using the available local technology to control emissions
    d. Using the best international technology to control emissions
    e. Combining the previous methods as per conditions

7. Do you believe that developing and enforcing standard emissions are enough to mitigate air pollution and establish accepted air quality, or should the law incorporate other criteria for an integrated program including:
    a. Emission Standards (Yes/ No)
    b. Determine isolated areas (Yes/No)
    c. Fuel type (Yes/No)
    d. Smokestack heights (Yes/No)
    e. Zoning certain areas for different activities (Yes/No)
    f. Others – specify.
    .....
8. Do you believe that a differentiation should be made between the current and the new emission sources? (Yes/No)
    If the answer is Yes, to what extent?
    .....
9. On inspecting the emission standards, it should (please select the suitable answer):
    a. Allow the violator a grace period of -----
    b. Impose an instant fine
    c. Shut down the facility immediately
    d. Warn the violator, notify, and advise him
    e. Provide technical/ tangible assistance
    f. Grant the low-emission facilities physical promotion e.g. cut taxes.

10. What is the time do you believe is enough to control the current emission sources to improve the ambient air?
    (Less than 5 years) (5-10 years)
    (10-15 years) (More than 15 years)

11. Do you recommend that the final goal should be achieved in phases, whereby each phase entails its emission standards, that later will be gradually modified?
    (Yes/No)
12. Do you recommend that the final goal should be reached through setting priorities for certain pollutants like: dust – sulfur dioxide – hydrocarbons (Yes/No)
13. Do you recommend phases, whereby each phase includes certain prioritized emission source for standardization and enforcement purposes?
14. What are the top priority sources in the first phase of law enforcement, in case the law is to be enforced in phases?
    (fuel combustion – waste burning – vehicles – cement industry – steel industry – smelters – chemicals – Oil and Petrochemicals – constructions – others [specify])
15. In case you agree on prioritized phases policy, what is the suitable duration of the first phase?
    (two years) (3 years) (5 years) (more that 5 years)

16. Do you believe that the Law and its Executive Regulations have covered the air pollution problem due to hazardous waste, e.g. hospital waste? (Yes/No)
    Why?
    .....
17. Do you believe that enforcing the Traffic Law in the current stage, which imposes sanctions on the violating vehicles emitting visual heavy smoke, is enough to reduce vehicle emissions? (Yes/No)

18. Do you believe that vehicle emissions standards need modifications to be:
    - More stringent.
      why? .....
    - Less stringent.
      why? .....

19. Are the standard emissions of different sources adequate and can they help improve the air quality, even temporarily, according to phasing process:
    - Fuel combustion in boilers (Yes/No)
    Why? .....
    - Fuel combustion in power stations (Yes/No)
    Why? .....
    - Fuel combustion in industrial furnaces (Yes/No)
    Why? .....
    - Waste burning (Yes/No)
    Why? .....
    - Steel industry (Yes/No)
    Why? .....
    - Cook industry (Yes/No)
    Why? .....
    - Oil and petrochemicals industry (Yes/No)
    Why? .....
    - Chemicals industry (Yes/No)
    Why? .....
    - Metals industry (Yes/No)
    Why? .....
    - Minerals industry (Yes/No)
    Why? .....
    - Construction industry (Yes/No)
    Why? .....
    - other (specify) .....

20. What other emission sources need more stringent emission standards?
    a. b. c.

21. What other emission sources need less stringent emission standards?
    a. b. c.

22. Do you believe that the articles of the current Executive Regulations are logical, comprehendible, and succinct?
    (Yes/No)

Why? .....

23. Please select (a) or (b)

    When modifying the Executive Regulations, the standard emissions should be classified according to:
    a. Each pollutant of different industries (particulates, carbon monoxide, etc)
    b. Each industry (different industrial pollutants)

24. Do you believe that the Executive Regulations should address emission standards of the existing sources:
    a. According to volume of activity
    b. According to location of activity and its distance from residential areas
    c. According to the type of pollution in the activity area

25. Do you believe that the emission standards of the existing sources should be developed at:
    a. National level
    b. Regional level (geographical level)
    c. As per area according to type of pollution
    d. Both national and regional levels

26. Do you believe that enforcing the law in the last stage has achieved the required goals (excellent/ Good/ Fair/ poor)

27. Do you believe that the Executive Regulations need to include other pollutants to be checked at the sources? (Yes/No)

28. Do you believe that using one pollutant or more as indicators for emissions is a suitable method to check sources and enforce the law, or should the source be inspected for all potential pollutants?
    a. Pollution indicators and controls
    b. Testing all potential pollutants

29. Do you believe that the environmental register for the industrial facilities has been established by the facilities at:
    Less than 10% of the facilities Less than 30 % Less than 50%
    Less than 75% All facilities

30. Do you believe that self-monitoring, and the environmental data registry actually reflect the facility's polluting byproducts?
    Yes
    Why? .....
    No
    Why? .....
31. Do you think that continuous self-monitoring is a successful means of monitoring emission sources?
    Yes
    Why? .....
    No

Why? .....

32. Do you believe that the current inspection system of facilities is practical?
    Yes
    Why? .....
    No
    Why? .....

33. Do you believe that routine facility inspection and pollution testing should take place once every (6 months / a year)

34. At which level should routine emission testing take place?
    a. at central level.
    b. At regional level.

35. The government bears the cost of emission testing in emergency cases/ complaints. Do you believe that the cost of testing should be incurred by:
    (Facility / Government)

36. Should any of the emission articles, included in the Executive Regulations, be modified? (Yes/ No)
    If yes, which articles?
    .....

CLASSIFIED QUESTIONNAIRE PER CATEGORY

Industry/ Energy Staff:

- What is the industry/energy you represent?
- Has the facility developed the environmental register?
- Does the facility carry out self-monitoring continuously?
- Has the facility ever been inspected? (Yes/ No)
- What were the post-inspection remarks?
  .....
- What are the constraints encountered when complying with the emission standards?
  a. - Technical: Production technology needs upgrading.
     - Emission leakage from other places excluding smokestacks.
     - Difficulty in controlling emissions from smokestacks
     - Storage of raw materials and products
     - Disposal of volatile waste
     - Fuel type
     - Other: .....

  b. Financial: Total cost ( )
     1. Difficulties to obtain grants
     2. Difficulties to obtain loans
     3. Investment constraints
     4. Investment can be obtained but it takes time (specify)
     5. Other (specify)
        1. 2.
        3. 4.

Non-governmental, political, and popular organizations

- Name of the association/ organization
- Activity of the association/ organization
- Headquarter of the association/ organization

Do you believe there is actual improvement in the air quality since the enforcement of the law no. 4, 1994 and its Executive Regulations? (Yes/ No)
If yes:

- In what way and to what extent?
  .....
- What are the procedures you propose to enhance this improvement?

If no:

- What are the constraints?
- Proposals to overcome these constraints to develop accepted air quality
  .....

Representatives of the Executive Ministries:

a. Ministry/ Authority/Agency
b. What is your role to protect the air environment?
    1. 2.
    3. 4.
c. Do the Executive Regulations cover your requirements to enforce the law and conserve the air environment? (Yes/No)
   If the answer is No, please provide your recommendations:
   1. 2.
   3. 4.

d. What are the constraints of enforcing the Executive Regulations?
   1. 2.
   3. 4.

Representatives of Scientific Research Centers/ Consultants/ Experts/ Education/ Information Agencies:

a. Name of Agency/ Ministry
b. What is the role that your entity can play in modifying the Executive Regulations concerning air standard emissions and in improving air quality in general?
    1. 2.
    3. 4.

c. What are the constraints you face in playing this role?
   1. 2.
   3. 4.

EEAA/ State Ministry for Environmental Affairs/ Environmental Offices:

a. Entity
b. Have you tested air pollution sources? (Yes/No)
c. How many facilities did you inspect?
d. How many facilities have you actually tested?
e. What were the activities you inspected and what were the violations?

Activity	Inspected facilities	Facilities tested for emissions	Facilities in Compliance	Violating facilities
1. Brick industry 2. Steel 3. Power Generating 4. 5. 6. 7. 8. 9. 10.				

What are the constraints you face while testing?

1.
2.
3.
4.
5.
6.

What are the shortcomings in enforcing the Executive Regulations?

1.
2.
3.
4.
5.
6.

<u>What are the general shortcomings of the Executive Regulations that you would like to mention?</u>

1.
2.
3.
4.